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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/599,226

06/27/2008

Olivier Godin

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EXAMINER

ALI, MOHAMMAD M

ART UNIT

PAPER NUMBER

3784

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/599,226	<b>Applicant(s)</b> GODIN, OLIVIER	
	<b>Examiner</b> MOHAMMAD ALI	<b>Art Unit</b> 3784	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-13, 15-18 and 20 is/are rejected.
- 7) ☒ Claim(s) 5, 6, 14 and 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>09/22/06</u> .  | 6) <input type="checkbox"/> Other: _____                          |

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 7-13, 15-18 and 20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over J. H. Benson hereinafter Benson (US 2,371,215). Benson discloses a roll-bond type vertical evaporating panel (24, Fig. 18) for cooling a refrigerator (the evaporator 24 is capable to cool a refrigerator or a freezer because refrigerator or a freezer is cooled by a refrigerant evaporator) freezer comprising: a circuit comprising a descending part (see Fig. 18) and an ascending part (see Fig. 18); the descending part of the circuit comprising a plurality of channels (5), each of the plurality of channels having a height (the each channel has a height), each of the plurality of channels also having a refrigerant accumulating area (see the to channel 5 with accumulated liquid refrigerant), the refrigerant accumulating area also having a height and a volume (see the height and

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volume of channel 5), and wherein the height of the refrigerant accumulating area of each of channel of the plurality of channels is less than approximately 70% (the liquid height/dashed part in the top channel 5 is approximately more than 50% but less than 70% of the total height of the channel 5) height of the respective channel. Benson discloses the invention substantially as claimed as stated above including the height of the refrigerant accumulating area being less than approximately 70% of the height of the respective channel. The Examiner considers the height of the accumulated refrigerant being less than approximately 70% of the total height of the channel 5 as shown in Fig. 18. Alternatively, choosing a specific refrigerant height is simply discovering an optimum value of a result effective variable which can be achieved by a routine skill of a skilled artisan.

Therefore, it is mentioned that it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272,205 USPQ 215 (CCPA 1980).

Regarding claims 1-2, 7, 15 and 16, the above disclosure of Benson discloses the limitations of claim 1, 7, 15 and 16.

Regarding claim 3, Benson discloses that the panel set forth in claim 1, wherein one end of at least one of the plurality of channels (5) is curved upwards (see the left end of the to channel 5 is curved upward, Fig. 18) so as to form a siphon (like a commode flushing) and create the accumulating area (for accumulating the refrigerant as shown in the top channel, Fig. 18).

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Regarding claim 4, Benson discloses that the panel set forth in claim 2, wherein at least one of the plurality of channels (5) is provided with a plurality of downward projections (see two side projections form bottom surface of the accumulator and one other projection forms the down ward pipe connected the next channel, Fig. 18), the projections forming accumulating areas (the first two side projections form an accumulator area).

Regarding claim 8, Benson discloses that the panel of claim 7 further comprising a compressor (see the compressor disposed between the condenser and evaporator 25, Fig. 18).

Regarding claim 9 and 10, see the remarks on claim 3 above.

Regarding claim 11, Benson discloses that the panel of claim 7 wherein at least several of the plurality of flow channels are horizontal (see the flow channels 5 are horizontal, Fig. 18).

Regarding claim 12, Benson discloses that panel of claim 11 wherein at least one of the plurality of flow channels (5) includes a vertical projection facing downward (see the vertical projection of channel 5) on the channel for accumulating cooling liquid (as seen in the upper channel).

Regarding claim 13, Benson discloses further comprising a boiler-type channel (10, like a horizontal boiler pipe, Fig 18, the Examiner considers the channel 10 as a boiler type channel because boiler has tube like channels).

15. A panel comprising: a circuit comprising a descending part and an ascending part, wherein liquid is present in the circuit, and wherein the descending part

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of the circuit comprises a plurality of flow channels each of which has an accumulating area; and wherein the volume of liquid present in the accumulating areas in all of the plurality of flow channels is no less than 50% of volume of liquid present in the circuit.

16. The panel set forth in claim 15, wherein each of the accumulating areas has a height and wherein each of the plurality of flow channels has a height, and wherein the height of each accumulating area is no more than 70% of the height of the flow channel in which the accumulating area is located.

17. The panel set forth in claim 16 further comprising a horizontal plane that separates the circuit into two compartments.

Regarding claim 18, see remarks on claim 3 above.

Regarding claim 20, see remarks on claim 8 above.

***Allowable Subject Matter***

Claims 5-6, 14 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MOHAMMAD ALI whose telephone number is (571)272-4806. The Examiner can normally be reached on Monday through Thursday from 8.30 am to 12 Noon and from 1 pm to 5.30 pm and on Friday from 6 am to 11.30 am and from 2.30 pm to 5 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jules Frantz can be reached on 571-272-6681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MOHAMMAD ALI/  
Primary Examiner, Art Unit 3784